JVC

SERVICE MANUAL

S.E.A. GRAPHIC EQUALIZER

MODEL SEA-E30B

Contents

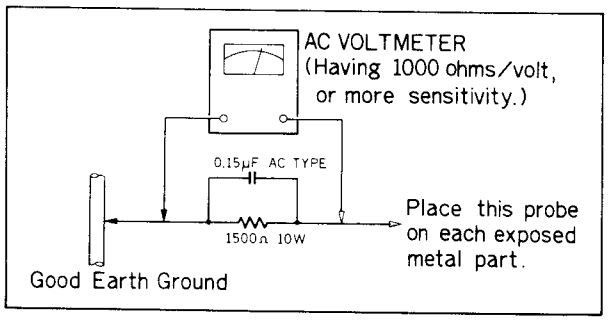
Safety Precautions 1-1
1. Specifications 1-2
2. Service Precautions
2-(1) Prior to Servicing Take Special Care about the Following Matters 1-3
2-(2) Relation between Switch Operation and Output 1-3
2-(3) Parts Replacement 1-3
3. Disassembly
3-(1) Removal of the Top Cover 1-4
3-(2) Removal of the Front Panel 1-4
3-(3) Removal of the Analog Switch P.C.B. 1-4
3-(4) Removal of the Power Supply P.C.B. 1-4
4. Block Diagram 1-5
5. SEA-E30B Schematic Diagram 1-6
Parts List . . . . . Separate-volume Insertion

This manual combines two single volumes; Service manual and Parts list.

No. 2786
Dec. 1984

Safety Precautions

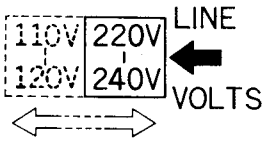
1. The design of this product contains special hardware, many circuits and components specially for safety purposes.
   For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the product have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list in Service manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and/or the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard.
   When service is required, the original lead routing and dress should be observed, and they should be confirmed to be returned to normal, after re-assembling.
5. Leakage current check
   (Safety for electrical shock hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the Products (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5 mA AC (r.m.s.).
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1500 Ω 10 W resistor paralleled by a 0.15 μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



CHECKING YOUR LINE VOLTAGE (Except for U.S.A., Canada, Australia, U.K. and Continental Europe.)

Before inserting the power plug, please check this setting to see that it corresponds with the line voltage in your area. If it doesn't, be sure to adjust the voltage selector switch to the proper setting before operating this equipment. The voltage selector switch is located on the rear panel.

CAUTION: Before selecting the "Voltage selector switch" to proper voltage, disconnect the power plug.



1. Specifications

Input section

SEA input	: Input impedance 47 kohms
Tape input	: Input impedance 47 kohms

Output section

SEA output	: Output impedance 300 ohms
Tape REC	: Output impedance 300 ohms (during SEA recording)
Rated output	: 1 V RMS (with SEA system flat)
Maximum output	: 4.5 V RMS (with SEA system flat, 0.5 %)
Total harmonic distortion	: 0.1 % (20 Hz – 20 kHz, rated output)
Gain	: 0 dB with SEA button ON (SEA system flat)
Frequency response	: 10 Hz – 50 kHz (+0, -2 dB)
S/N ratio	: 110 dB (at rated output, IHF A-network short-circuited)

Control section

SEA center frequencies	: 31.5 Hz, 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 2 kHz, 4 kHz, 8 kHz, 16 kHz
SEA control range	: ±10 dB

General

Power source	: See attached table
Dimensions	: 59(H) x 340(W) x 265(D) mm (2-5/16" x 13-3/8" x 10-7/16")
Weight	: 1.7 kg (3.7 lbs)
Accessory	: 2 pairs of one-touch signal cords (11 cm)

Note:
IHF: Initials of the Institute of High Fidelity in the U.S.A.

Design and specifications subject to change without notice.

POWER SPECIFICATIONS

Areas	Power Supply	Power Consumption	Power Outlet	Fuse (Primary) F001
U.S.A. & Canada	AC 120 V∿, 60 Hz	6 watts	Fitted	QMF51U2-R20 (0.2 A – 250 V)
Europe	AC 220 V∿, 50 Hz	8 watts	Not Fitted	QMF51A2-R20S (T 200 mA)
U.K.	AC 240 V∿, 50 Hz	8 watts	Not Fitted	QMF51E2-R20SBS (T 200 mA)
Australia	AC 240 V∿, 50 Hz	8 watts	Not Fitted	QMF51A2-R20S (T 200 mA)
U.S. Military Market & Other Areas	AC 110 V – 120 V/ 220 V – 240 V∿ selectable, 50/60 Hz	8 watts	Not Fitted	QMF51A2-R20S (T 200 mA)

2. Service Precautions

2-(1) Prior to Servicing Take Special Care about the Following Matters

1. Parts marked with ⚠ symbol on the circuit diagram and parts list are important for safety. When replacing those parts, be sure to use the specified parts numbers.
2. Confirm that all metallic clamps are covered with vinyl tubes.
3. Confirm the thickness of newly replaced wire's insulating film (0.3 mm and more).
4. When the power cord is replaced, the new one does not come out if it is pulled in all different directions.
5. Parts relating to the power source and wires have been bound up and soldered.
6. After completion of soldering parts between terminals of the AC power line, confirm that there remains space and distance more than 3 mm between neighboring parts. Pay special attention to solder's quantity, bend and burr of wire.

2-(2) Relation between Switch Operation and Output

TAPE MONITOR	TAPE REC TERMINAL 'OUT'	LINE OUT TERMINAL 'OUT'
OFF	LINE IN signal SEA . . . . . Operative	LINE IN signal SEA ON/OFF . . . . . Operative
ON	LINE IN signal SEA . . . . . Operative	TAPE playback SEA ON/OFF . . . . . Inoperative

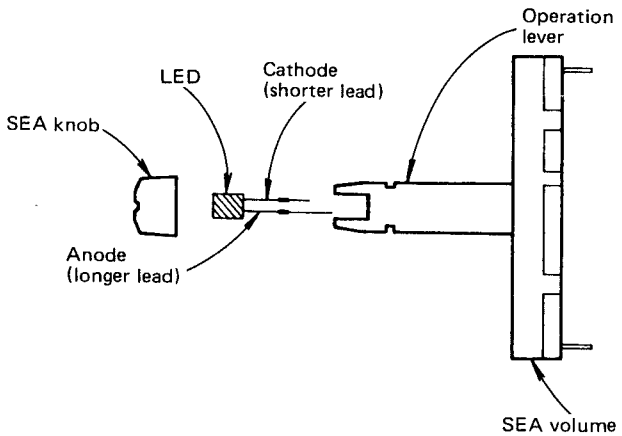
2-(3) Parts Replacement

1. This model is composed of the parts shown in the diagram of details on page 1-4, "Disassembly".
   As all board assemblies are fixed to the chassis with screws, refer to the section of "Disassembly" when disassemble and re-assemble this set.

2. LEDs built in SEA volume control levers can be removed as shown in the figure below.
   If one of LEDs (for a block of right or left) is set with reverse polarity or in open circuit, all LEDs do not light.
   As adjoining LEDs are set with reverse polarity alternately, take special care about it when replacing LEDs.
   When placing an order for a single LED, specify the parts number of AA3422K.

[How to distinguish a defective LED from normal ones]

Pull an LED slightly forward 1–2 mm, and make a short-circuit at its both lead wires. If other 4 LEDs light in this state, the LED is defective.



3. Disassembly

3-(1) Removal of the Top Cover

1. Remove four screws ❶ on both sides.
2. Remove two screws ❷ of the rear panel.
3. Lift up the rear side and pull out the top cover from the front panel.

3-(2) Removal of the Front Panel

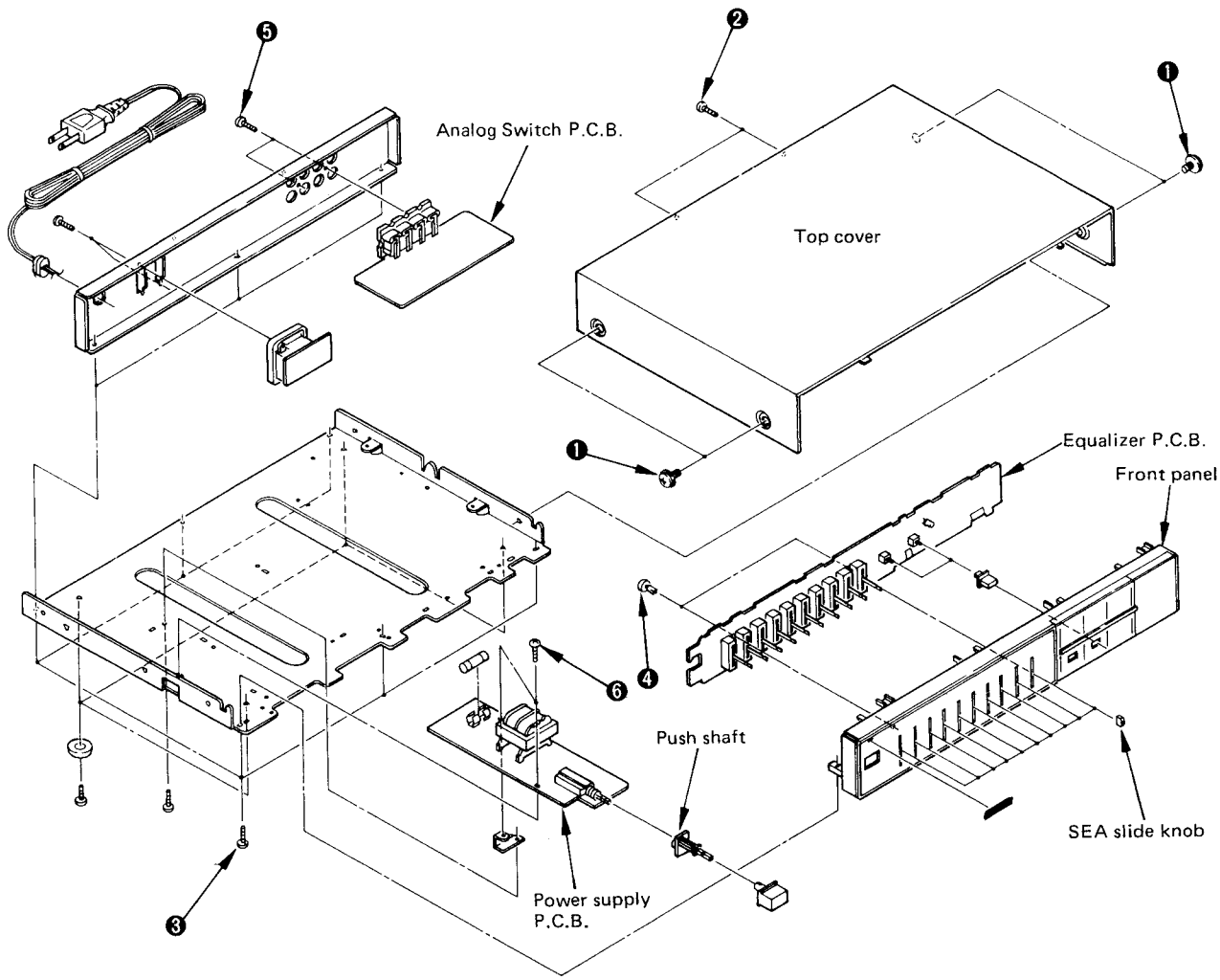
1. Pull out ten SEA slide knobs.
2. Remove three screws ❸ fixing the front panel from the bottom.
3. Pull out two plastic rivets ❹ fixing the equalizer P.C.B.
4. Remove the P.C.B. from the click points (eight at the top and bottom) fixing it to the front panel.

3-(3) Removal of the Analog Switch P.C.B.

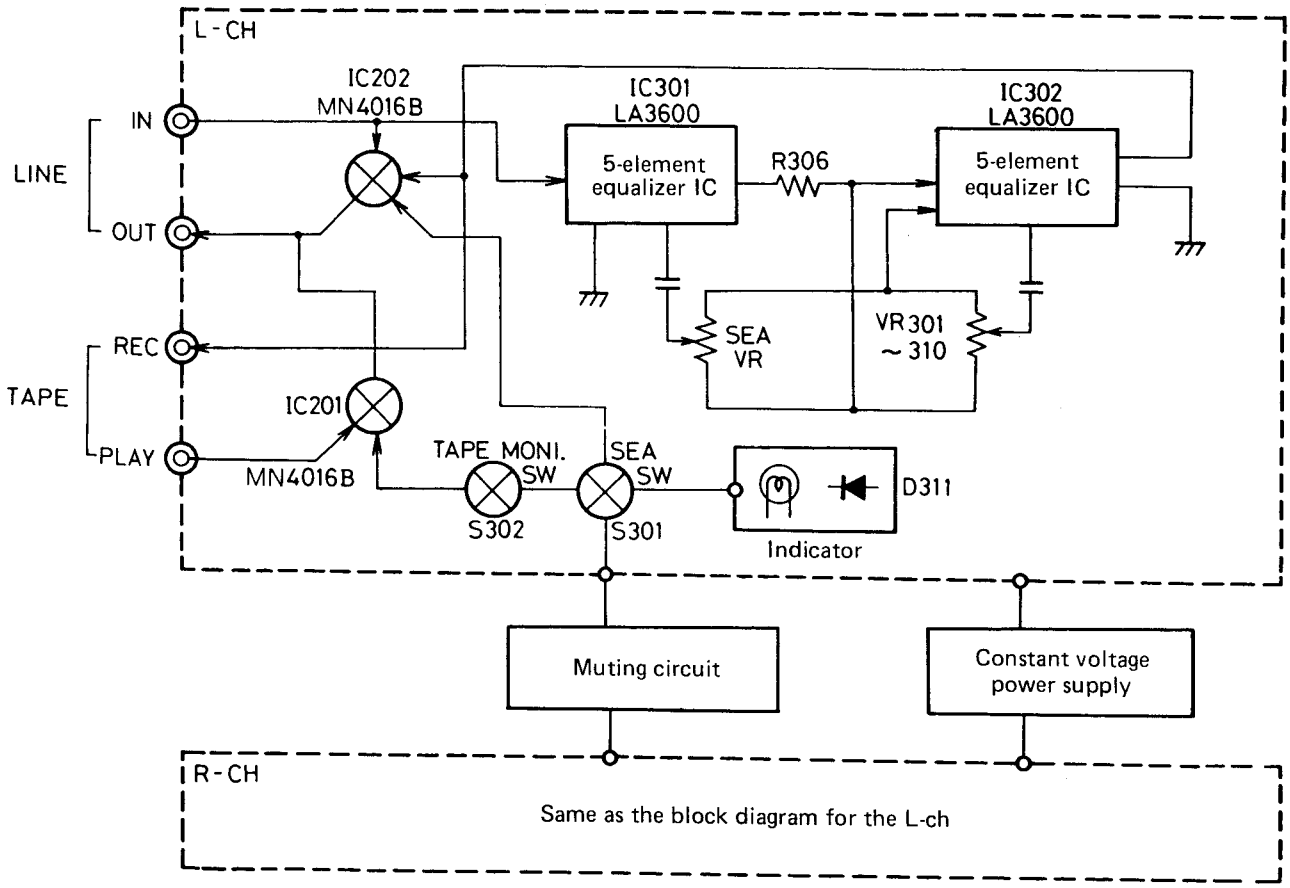
1. Remove two screws ❺ fixing the pin jacks from the rear panel.

3-(4) Removal of the Power Supply P.C.B.

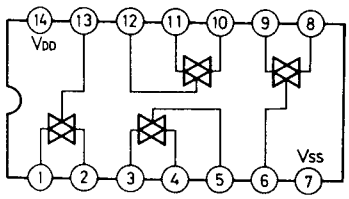
1. Remove two screws ❻ fixing the P.C.B.
2. Pull out the push shaft from the power switch.



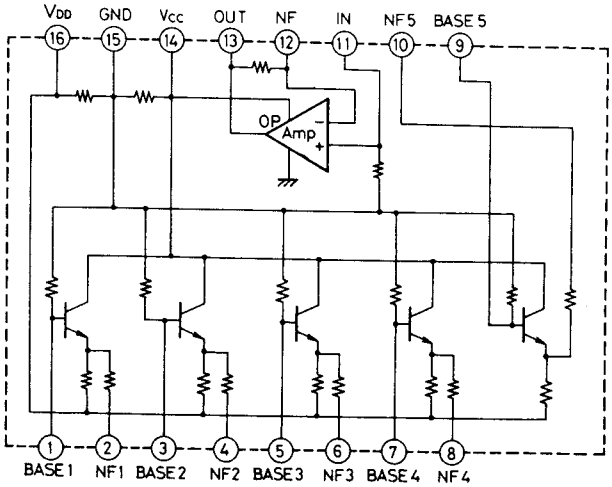
4. Block Diagram



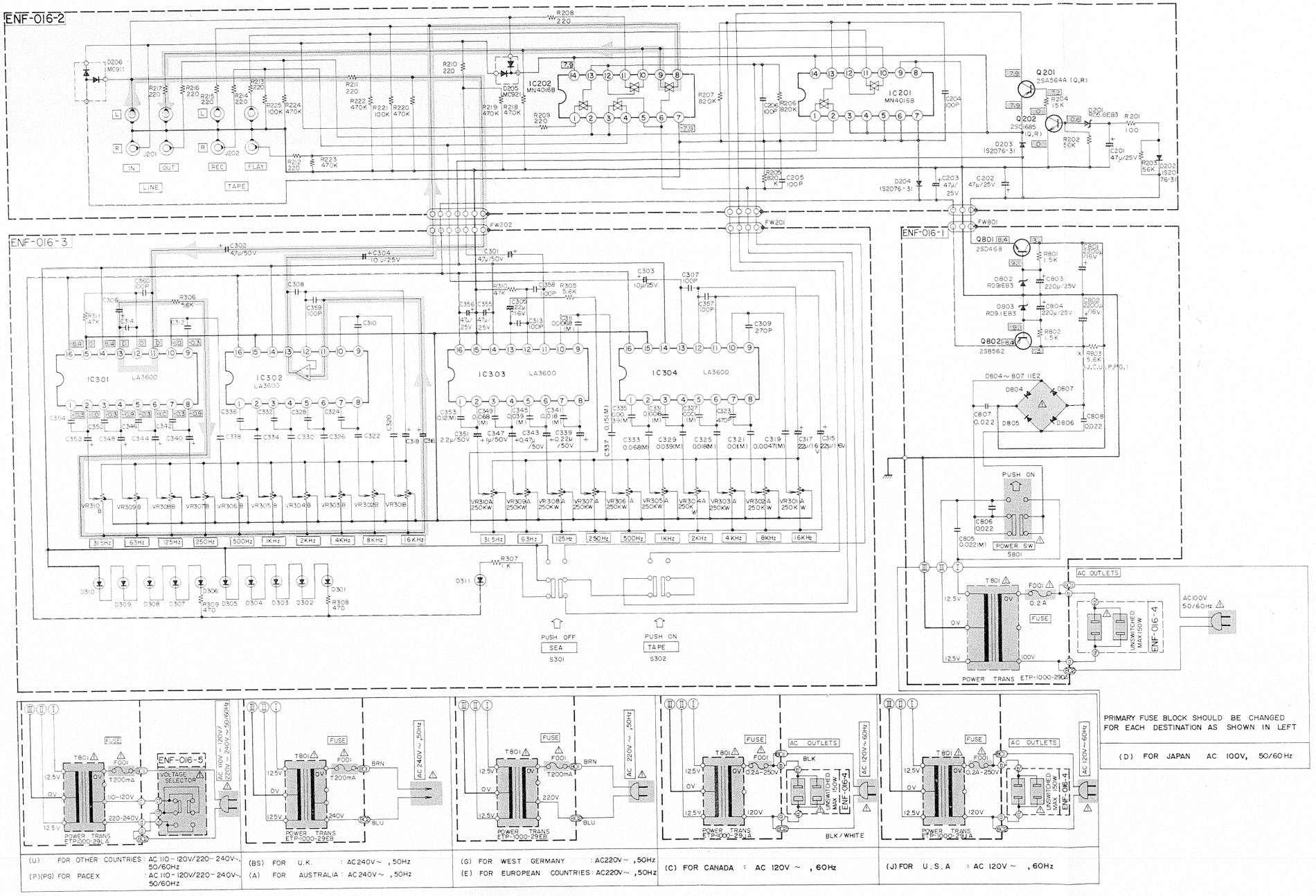
MN4016B



LA3600



5. SEA-E30B Schematic Diagram



Notes:

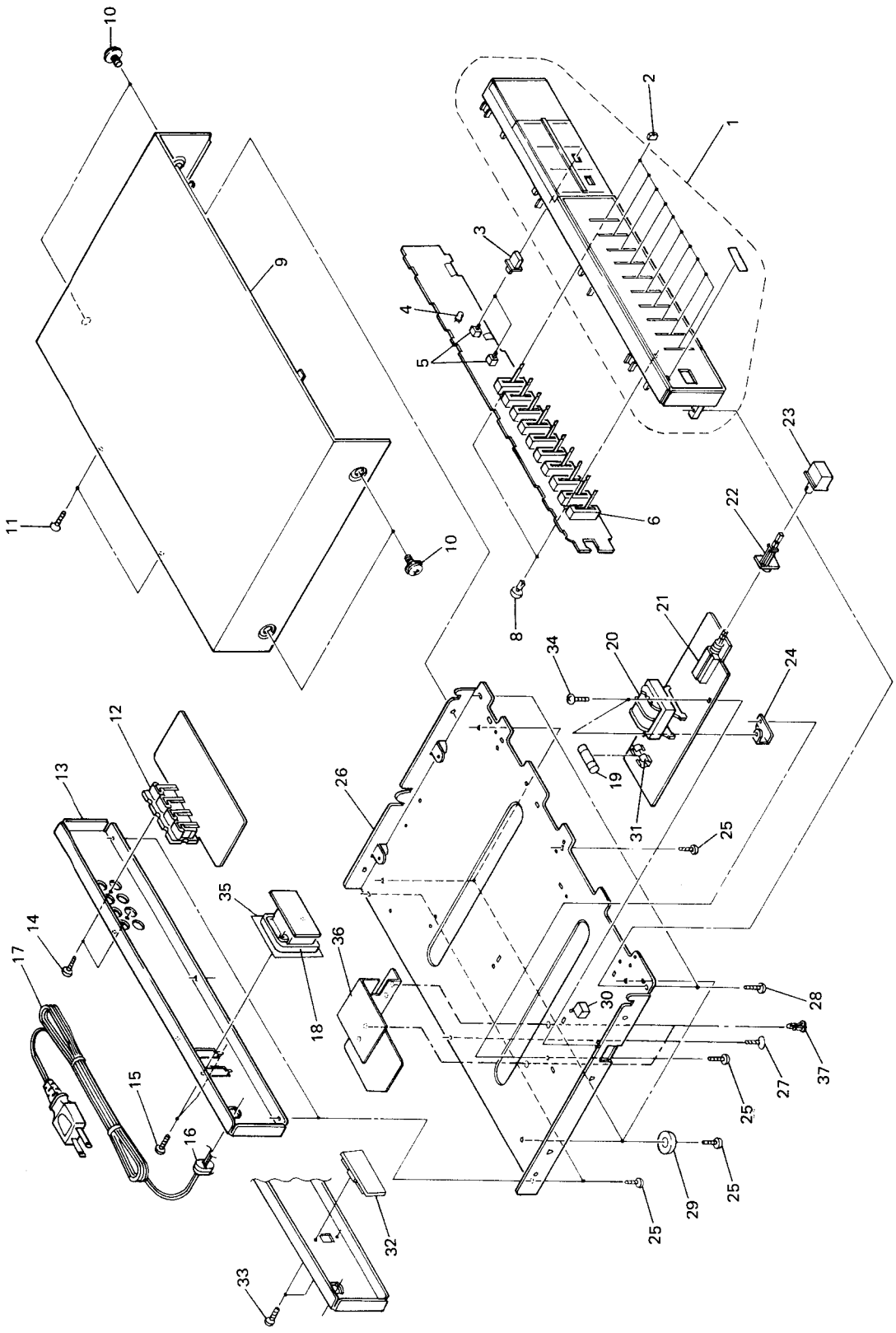
1. ▭ shows DC voltage to the chassis with no signal input.
2. ——— indicates positive B power supply.
3. ------ indicates negative B power supply.
4. ▭ indicates signal path.
5. When replacing the parts in the darkened area (▭) and those marked with ⚠, be sure to use the designated parts to ensure safety.
6. This is the standard circuit diagram.
   The design and contents are subject to change without notice.

PARTS LIST

Contents

1. Exploded View and Part Numbers . . . . . 2 - 2
2. Printed Circuit Board Ass'y and Parts List . . . . . 2 - 4
2-(1) ENF-016 □ SEA Amplifier P.C. Board Ass'y . . . . . 2 - 4
3. Packing Materials and Part Numbers . . . . . 2 - 7
4. Accessories List . . . . . 2 - 7

1. Exploded View and Part Numbers



Note: Those items shown on the disassembly diagram without indication of reference Nos. are supplied as assembly parts.

⚠	No.	Part Number	Part Name	Q'ty	Description	Areas
	1	EFP-SEAE30	Front Panel Ass'y	1		
		E70912-001	JVC Mark	1		
	2	E70851-001	Slide knob	10		
	3	E71716-001	Push Button	2	TAPE MONITOR, SEA	
	4	SLR-55VC50F	L.E.D.	1		
	5	QSP0301-006	Push Switch	2	TAPE MONITOR, SEA	
	6	QVZ5311-001	Variable Resistor	10		
	7	—	—	—	—	—
	8	E48729-007	Plastic Rivet	2		
	9	E24008-007	Metal Cover	1		
	10	E61660-004	Special Screw	4		
	11	SHSB3008M	Screw	2		
	12	EMN00TV-402A	4P Pin Jack	2	TAPE, LINE	
	13	E24841-003	Rear Panel	1		E, G
		E24841-004	Rear Panel	1		A, BS
		E24841-005	Rear Panel	1		P, PG, U
		E24841-006	Rear Panel	1		J, C
	14	SBSB3008M	Tapping Screw	2		
	15	SDSB3008M	Tapping Screw	2	AC Outlet	
⚠	16	QHS3876-162	Cord Stopper	1		J, C, P, PG, E, A, G, U
⚠		QHS3876-162BS	Cord Stopper	1		BS
⚠	17	QMP1200-200	Power Cord	1		J
⚠		QMP1340-200	Power Cord	1		C
⚠		QMP2560-244	Power Cord	1		A
⚠		QMP3900-200	Power Cord	1		E, G
⚠		QMP7600-250	Power Cord	1		P, PG, U
⚠		QMP9017-008BS	Power Cord	1		BS
⚠	18	QMC0440-001	AC Outlet	1		C
⚠		QMC0437-002	AC Outlet	1		J
⚠	19	QMF51A2-R20S	Fuse	1		P, PG, E, A, G, U
⚠		QMF51E2-R20SBS	Fuse	1		BS
⚠		QMF51U2-R20	Fuse	1		J, C
⚠	20	ETP1000-29EBBS	Power Transformer	1		BS
⚠		ETP1000-29EB	Power Transformer	1		E, A, G
⚠		ETP1000-29JA	Power Transformer	1		J, C
⚠		ETP1000-29LA	Power Transformer	1		P, PG, U
	21	QST4101-E14	Power Switch	1	POWER	
	22	E71712-002	Push Shaft	1	POWER	
	23	E67628-002	Push Button	1	POWER	
	24	E68587-003	Bracket	1		
	25	SBSB3008N	Tapping Screw	8		
	26	E24843-001	Chassis Base	1		
	27	SHSB3008N	Screw	1		
	28	SBSF30082	Tapping Screw	2		
	29	E47227-021	Foot	4		
	30	Y40434-019	Spacer	1		
	31	EMG7331-001	Fuse Clip	2		
	32	QSS8A22-E01	Voltage Selector	1		P, PG, U
	33	E65119-004	Special Screw	2	Voltage Selector	P, PG, U
	34	GBSB3008N	Tapping Screw	2		
	35	E69589-002	Spacer	1	AC Outlet	J

⚠ : Safety Parts

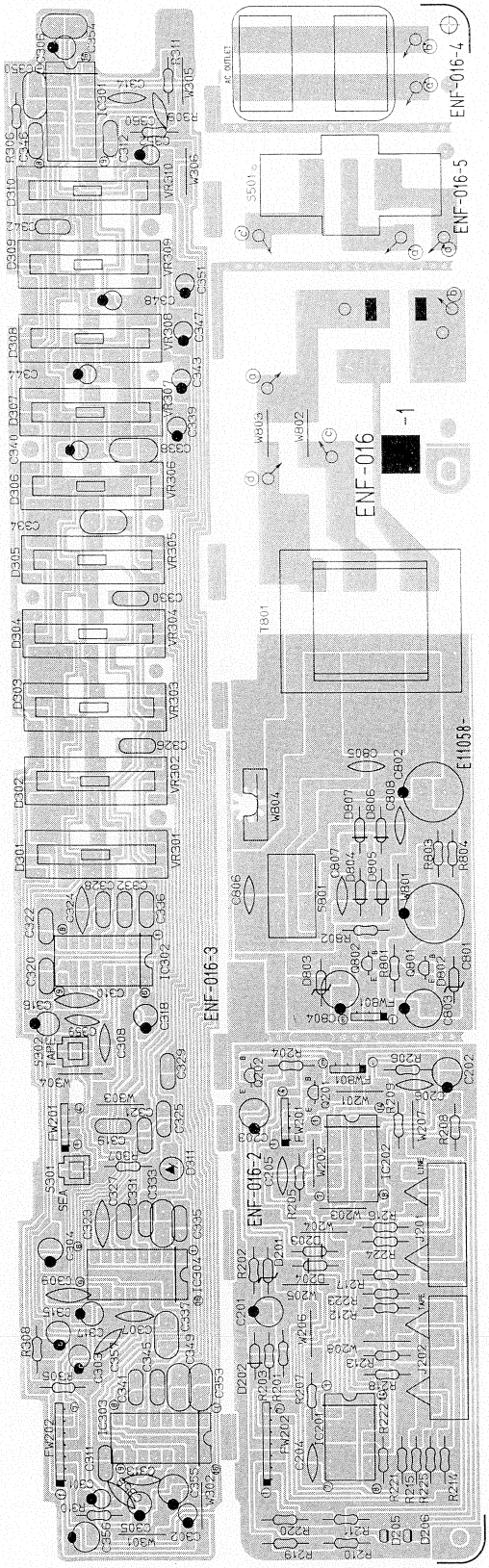
The Marks for Designated Areas

J . . . . . U.S.A.
C . . . . . Canada
P, PG . . . . . U.S. Military Market
E . . . . . Europe
G . . . . . West Germany
BS . . . . . U.K.
U . . . . . Other Countries

2. Printed Circuit Board and Parts List

2-(1) ENF-016 □ SEA Amplifier P.C. Board Ass'y

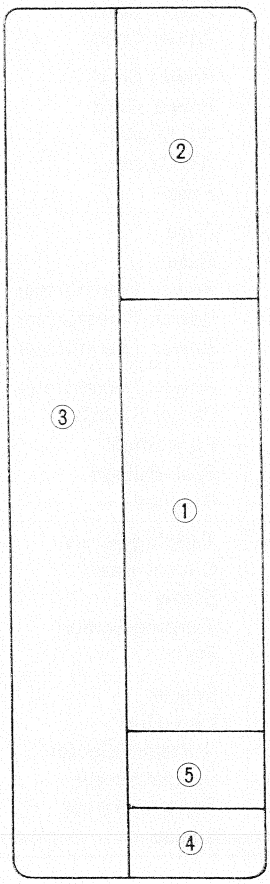
Note: ENF-016 □ varies according to the areas employed. See note (1) when placing an order.



Note (1)

P.C. Board Ass'y	Designated Areas
ENF-016 B	U.S.A.
ENF-016 CBS	U.K.
ENF-016 D	Europe
ENF-016 E	U.S. Military Market & Other Countries
ENF-016 F	West Germany
ENF-016 G	Canada
ENF-016 H	Australia

Each Individual P.C. Board Location



① ENF-016-1
Power Supply P.C. Board Ass'y

② ENF-016-2
Analog Switch and Mute P.C. Board Ass'y

③ ENF-016-3
SEA Amp. P.C. Board Ass'y

④ ENF-016-4
AC Outlet P.C. Board Ass'y

⑤ ENF-016-5
Voltage Selector P.C. Board Ass'y

Transistors

⚠	Item No.	Part Number	Description		Areas
				Maker	
	Q201	2SA564A (Q, R)	Silicon	Matsushita	
	Q202	2SC1685 (Q, R)	Silicon	Matsushita	
	Q801	2SD468 (C)	Silicon	Hitachi	
	Q802	2SB562 (C)	Silicon	Hitachi	

ICs

⚠	Item No.	Part Number	Description		Areas
				Maker	
	IC201	MN4016B	I.C.	Matsushita	
	IC202	MN4016B	I.C.	Matsushita	
	IC301	LA3600	I.C.	Sanyo	
	IC302	LA3600	I.C.	Sanyo	
	IC303	LA3600	I.C.	Sanyo	
	IC304	LA3600	I.C.	Sanyo	

Diodes

⚠	Item No.	Part Number	Description		Areas
				Maker	
	D201	RD5.6EB3	Zener	NEC	
	D202	1S2076-31	Silicon	Hitachi	
	D203	1S2076-31	Silicon	Hitachi	
	D204	1S2076-31	Silicon	Hitachi	
	D205	MC921	Silicon	Ryoyo	
	D206	MC911	Silicon	Ryoyo	
	D311	SLR-55VC50F	L.E.D.	Rohm	
	D802	RD9.1EB3	Zener	NEC	
	D803	RD9.1EB3	Zener	NEC	
	D804	11E2	Silicon	Nippon Inter	
	D805	11E2	Silicon	Nippon Inter	
	D806	11E2	Silicon	Nippon Inter	
	D807	11E2	Silicon	Nippon Inter	

Capacitors

⚠	Item No.	Part Number	Description			Areas
	C201	QETC1EM-476	47μF	25V	Electro	
	C202	QETC1EM-476	47μF	25V	Electro	
	C203	QETC1EM-476	47μF	25V	Electro	
	C204	QCY31HK-101	100pF	50V	Ceramic	
	C205	QCY31HK-101	100pF	50V	Ceramic	
	C206	QCY31HK-101	100pF	50V	Ceramic	
	C301	QEK61HM-475	4.7μF	50V	Electro	
	C302	QEK61HM-475	4.7μF	50V	Electro	
	C303	QETB1EM-106	10μF	25V	Electro	
	C304	QEK61EM-106	10μF	25V	Electro	
	C305	QEK61CM-226	22μF	16V	Electro	
	C306	QEK61CM-226	22μF	16V	Electro	
	C307	QCY31HK-101	100pF	50V	Ceramic	
	C308	QCY31HK-101	100pF	50V	Ceramic	
	C309	QCY21HK-271	270pF	50V	Ceramic	

Capacitors

⚠	Item No.	Part Number	Description			Areas
	C310	QCY31HK-271	270pF	50V	Ceramic	
	C311	QFN31HJ-682	6800pF	50V	Mylar	
	C312	QFN31HJ-682	6800pF	50V	Mylar	
	C313	QCY21HK-101	100pF	50V	Ceramic	
	C314	QCY31HK-101	100pF	50V	Ceramic	
	C315	QEK61CM-226	22μF	16V	Electro	
	C316	QEK61CM-226	22μF	16V	Electro	
	C317	QEK61CM-226	22μF	16V	Electro	
	C318	QEK61CM-226	22μF	16V	Electro	
	C319	QFN31HJ-472	4700pF	50V	Mylar	
	C320	QFN31HJ-472	4700pF	50V	Mylar	
	C321	QFN31HJ-103	0.01μF	50V	Mylar	
	C322	QFN31HJ-103	0.01μF	50V	Mylar	
	C323	QCY31HK-471	470pF	50V	Ceramic	
	C324	QCY31HK-471	470pF	50V	Ceramic	
	C325	QFN31HJ-183	0.018μF	50V	Mylar	
	C326	QFN31HJ-183	0.018μF	50V	Mylar	
	C327	QFN31HJ-102	1000pF	50V	Mylar	
	C328	QFN31HJ-102	1000pF	50V	Mylar	
	C329	QFN31HJ-393	0.039μF	50V	Mylar	
	C330	QFN31HJ-393	0.039μF	50V	Mylar	
	C331	QFN31HJ-182	1800pF	50V	Mylar	
	C332	QFN31HJ-182	1800pF	50V	Mylar	
	C333	QFN81HJ-683	0.068μF	50V	Mylar	
	C334	QFN31HJ-683	0.068μF	50V	Mylar	
	C335	QFN31HJ-392	3900pF	50V	Mylar	
	C336	QFN31HJ-392	3900pF	50V	Mylar	
	C337	QFN31HJ-154	0.15μF	50V	Mylar	
	C338	QFN31HJ-154	0.15μF	50V	Mylar	
	C339	QEK61HM-224	0.22μF	50V	Electro	
	C340	QEK61HM-224	0.22μF	50V	Electro	
	C341	QFN31HJ-183	0.018μF	50V	Mylar	
	C342	QFN31HJ-183	0.018μF	50V	Mylar	
	C343	QEK61HM-474	0.47μF	50V	Electro	
	C344	QEK61HM-474	0.47μF	50V	Electro	
	C345	QFN31HJ-393	0.039μF	50V	Mylar	
	C346	QFN31HJ-393	0.039μF	50V	Mylar	
	C347	QEK61HM-105	1μF	50V	Electro	
	C348	QEK61HM-105	1μF	50V	Electro	
	C349	QFN81HJ-683	0.068μF	50V	Mylar	
	C350	QFN81HJ-683	0.068μF	50V	Mylar	
	C351	QEK61HM-225	2.2μF	50V	Electro	
	C352	QEK61HM-225	2.2μF	50V	Electro	
	C353	QFN31HJ-124	0.12μF	50V	Mylar	
	C354	QFN81HJ-124	0.12μF	50V	Mylar	
	C355	QETB1EM-476	47μF	25V	Electro	
	C356	QEK61EM-476	47μF	25V	Electro	
	C357	QCY21HK-101	100pF	50V	Ceramic	
	C358	QCY21HK-101	100pF	50V	Ceramic	
	C359	QCY21HK-101	100pF	50V	Ceramic	
	C360	QCY21HK-101	100pF	50V	Ceramic	
	C801	QETB1CM-228	2200μF	16V	Electro	
	C802	QETB1CM-228	2200μF	16V	Electro	
	C803	QETC1EM-227	220μF	25V	Electro	
	C804	QETC1EM-227	220μF	25V	Electro	
	C805	QFN31HJ-223	0.022μF	50V	Mylar	
	C806	QCF31HP-223	0.022μF	50V	Ceramic	
	C807	QCF31HP-223	0.022μF	50V	Ceramic	
	C808	QCF31HP-223	0.022μF	50V	Ceramic	

Resistors

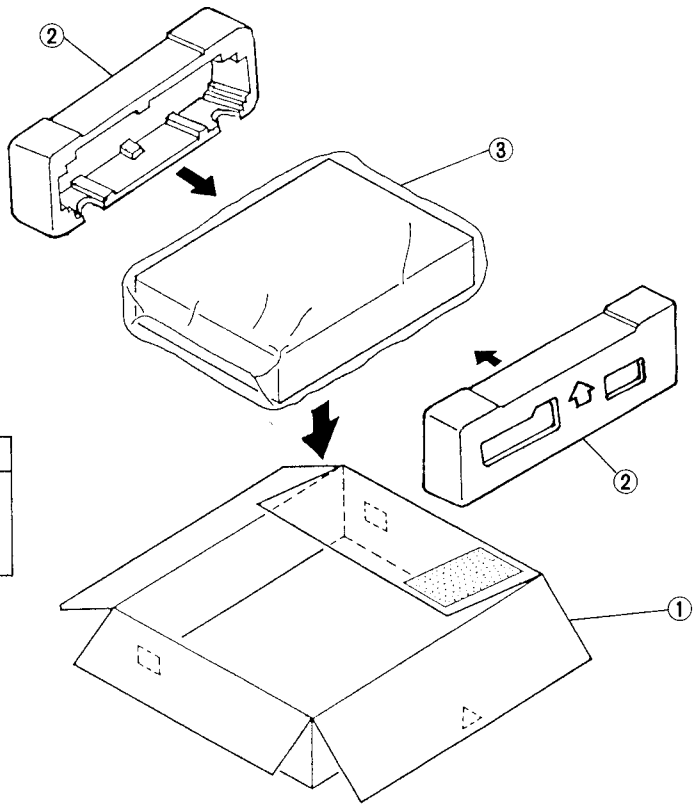
⚠	Item No.	Part Number	Description			Areas
	R201	QRD141J-101S	100 Ω	1/4 W	Carbon	
	R202	QRD141J-563S	56 kΩ	1/4 W	Carbon	
	R203	QRD141J-563S	56 kΩ	1/4 W	Carbon	
	R204	QRD141J-153S	15 kΩ	1/4 W	Carbon	
	R205	QRD141J-824S	820 kΩ	1/4 W	Carbon	
	R206	QRD141J-824S	820 kΩ	1/4 W	Carbon	
	R207	QRD141J-824S	820 kΩ	1/4 W	Carbon	
	R208	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R209	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R210	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R211	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R212	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R213	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R214	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R215	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R216	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R217	QRD141J-221S	220 Ω	1/4 W	Carbon	
	R218	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R219	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R220	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R221	QRD141J-104S	100 kΩ	1/4 W	Carbon	
	R222	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R223	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R224	QRD141J-474S	470 kΩ	1/4 W	Carbon	
	R225	QRD141J-104S	100 kΩ	1/4 W	Carbon	
	R305	QRD141J-562S	5.6 kΩ	1/4 W	Carbon	
	R306	QRD141J-562S	5.6 kΩ	1/4 W	Carbon	
	R307	QRD141J-102S	1 kΩ	1/4 W	Carbon	
	R308	QRD141J-471S	470 Ω	1/4 W	Carbon	
	R309	QRD141J-471S	470 Ω	1/4 W	Carbon	
	R310	QRD141J-473S	47 kΩ	1/4 W	Carbon	
	R311	QRD141J-473S	47 kΩ	1/4 W	Carbon	
	R801	QRD141J-152S	1.5 kΩ	1/4 W	Carbon	
	R802	QRD141J-152S	1.5 kΩ	1/4 W	Carbon	
	R803	QRD141J-562S	5.6 kΩ	1/4 W	Carbon	B
	R803	QRD141J-562S	5.6 kΩ	1/4 W	Carbon	E
	R803	QRD141J-562S	5.6 kΩ	1/4 W	Carbon	G
	VR301	QVZ5311-001	250 kΩ		Variable	
	VR302	QVZ5311-001	250 kΩ		Variable	
	VR303	QVZ5311-001	250 kΩ		Variable	
	VR304	QVZ5311-001	250 kΩ		Variable	
	VR305	QVZ5311-001	250 kΩ		Variable	
	VR306	QVZ5311-001	250 kΩ		Variable	
	VR307	QVZ5311-001	250 kΩ		Variable	
	VR308	QVZ5311-001	250 kΩ		Variable	
	VR309	QVZ5311-001	250 kΩ		Variable	
	VR310	QVZ5311-001	250 kΩ		Variable	

Others

⚠	Item No.	Part number	Description	Areas
		E11058-102	Circuit Board	B
		E11058-102	Circuit Board	G
		E11058-202	Circuit Board	D
		E11058-202	Circuit Board	E
		E11058-202	Circuit Board	F
		E11058-202	Circuit Board	H
		E11058-202BS	Circuit Board	CBS
		QMC0437-002	AC Socket	
		QMC0440-001	AC Outlet	
		E65508-002	Tab	
		EMG7331-001	Fuse Clip	
		EMG7331-001	Fuse Clip	
	J201	EMN00TV-402A	Pin Jack Assy	
	J202	EMN00TV-402A	Pin Jack Assy	
	S301	QSP0301-006	Push Switch	
	S302	QSP0301-006	Push Switch	
⚠	S501	QSS8A22-E01	Voltage Selector	
	S801	QST4101-E14	Push Switch	
⚠	T801	ETP1000-29EA	Power Transformer	D
⚠	T801	ETP1000-29EA	Power Transformer	F
⚠	T801	ETP1000-29EA	Power Transformer	H
⚠	T801	ETP1000-29EABS	Power Transformer	CBS
⚠	T801	ETP1000-29JA	Power Transformer	B
⚠	T801	ETP1000-29JA	Power Transformer	G
⚠	T801	ETP1000-29LA	Power Transformer	E

⚠ : Safety Parts

3. Packing Materials and Part Numbers



Packing Materials

No.	Part Number	Part Name	Q'ty	Description
1	PK-SEAE30E(B)	Packing Case	1	
2	NZ-SEA30	Fillers	2	(E24857-001)
3	E302688-010	Protect Sheet	1	J,C,P,PG,A,E,G,U
	E302688-010B	Protect Sheet	1	BS

The Marks for Designated Areas

J . . . . . U.S.A.
C . . . . . Canada
P, PG . . . . . U.S. Military Market
E . . . . . Europe
G . . . . . West Germany
BS . . . . . U.K.
U . . . . . Other Countries

4. Accessories List

⚠	Part Number	Part Name	Area
	E30580-1214A	Instruction Book	J, C, P, PG, A, E, G, U
	E30580-1214ABS	Instruction Book	BS
	BT20048B	Warranty Card	J, P, PG
	BT20025H	Warranty Card	C
	BT20029C	Warranty Card	A
	BT20060	Warranty Card	BS
	BT20064	Warranty Card	G
	BT20066	ECC Agency	BS, G
	BT20071A	Service Center List	C
	BT20054-006A	FTZ Information Card	G
	BT20046B	Service Information Card	J, P, PG
	BT20044D	Safety Instruction Sheet	J
	EWP307-002	Signal Cord	
	E04056	Siemens Plug	PG, U
	E35497-022	Caution Sheet (220 V – 240 V)	PG, U
	E35497-021	Caution Sheet (110 V – 120 V)	P
	E300196-033	Envelope (for Instruction Book)	J, C, P, PG, A, E, G, U
	E300196-033B	Envelope (for Instruction Book)	BS
	E66416-003	Envelope (for Warranty Card)	J